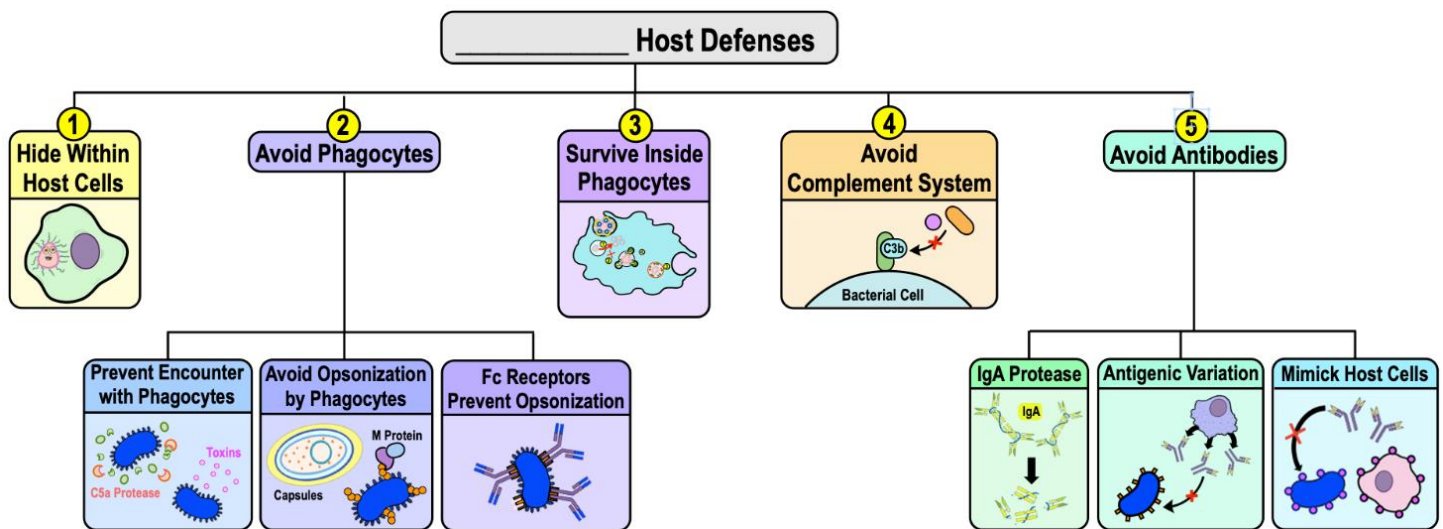


## CONCEPT: INTRODUCTION TO AVOIDING HOST DEFENSE MECHANISMS

- Pathogens have a wide variety of mechanisms that allow them to avoid defense mechanisms of a host.



**PRACTICE:** Many pathogens have evolved mechanisms that allow them to avoid being phagocytosed by immune cells.

However, some pathogens choose to be phagocytosed. Why would they do this?

- Phagocytosis of the pathogen by an immune cell allows the pathogen to easily enter host cells.
- Phagocytosis of the pathogen by an immune cell ensures the pathogen cannot be destroyed.
- Phagocytosis of the pathogen by an immune cell ensures that the immune cells cannot multiply.

**PRACTICE:** All of the following are methods that pathogens use to avoid phagocytosis by immune cells **except** which of these answers?

- The pathogens avoid being bound by C3b proteins that trigger opsonization.
- The pathogens possess Fc receptors which bind and change the orientation of antibodies bound to them.
- The pathogens create IgA proteases which break down IgA antibodies before they can bind the pathogen.
- The pathogens create toxins which damage the phagocytic immune cells stopping phagocytosis.